**Homework 40H Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
Congruence & Triangles Period\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Failure to show all work will result in LaSalle!

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| In the diagram, Δ*TJM* ≅ Δ*PHS*. Complete the statement.   1. ∠*P* ≅ \_\_?\_\_ 2. ≅ \_\_?\_\_   *JM*   1. *m*∠*M*= \_\_?\_\_ 2. *m*∠*P* = \_\_?\_\_ 3. *MT =* \_\_?\_\_ 4. Δ*HPS* ≅ \_\_?\_\_ | 7. Find the value of *x*. |
| 8. Find the value of x. | 9. Given Δ *ABC* ≅ Δ*DEF* , find the value of x and y. |
| 10. Graph and classify the triangle with vertices *A*(l, 2), *B*(l, 2), and *C*(5, 4). (Find the length and slope of each segment) | |
| 11) | |
| 12) Find the value of ‘Y’ in the picture below.     1. 42 2. 32 3. 40 4. 50 | 13) In the Pythagorean triple (*a,b,c*), what is special about the value of *c*?  **A.** It is always even.  **B.** It is always the largest of the three.  **C.** It is always the smallest of the three.   1. It is always odd. |
| 14) In the Pythagorean triple (*a,b,c*), what is special about the values of *a* and *b*?  **A.** They are the two long sides of a right triangle.  **B.** They are always equal to each other.  **C.** They are the two short sides of a right triangle.  **D.** *a* is always bigger than *b*. | 15) Which of the following triples is a Pythagorean triple?  **A.** (5, 12, 17)  **B.** (4, 5, 6)  **C.** (9, 40, 41)  **D.** (8, 10 18) |
| 16) Which of the following triangles is correctly labeled?  A.  B.  C. D. None are labeled correctly | |